## UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE BIOLOGICAL CONSERVATION SCIENCES DIVISION WASHINGTON, D. C.

## NOTICE OF RELEASE OF 'EARL' BIG BLUESTEM "Nobleman of High Rank"

The United States Department of Agriculture, Natural Resources Conservation Service formerly the Soil Conservation Service announce the naming and release of 'Earl' big bluestem, *Andropogon gerardii*, vitman.

'Earl' was developed at the Natural Resources Conservation Service Plant Materials Center, Knox City, Texas. The permanent number assigned to 'Earl' big bluestem is PI-408932.

'Earl' big bluestem was originally collected from a native stand near Weatherford in Parker County, Texas. It was collected in October of 1968 by NRCS employee Earl Hogan of the Weatherford Field Office.

Seed from this accession was planted at the Knox City Plant Materials Center in 1971 and evaluated against 122 other collection including the released varieties of Kaw, Pawnee and Champ. In evaluations from 1971-1974 'Earl' rated in the top five selections when considering foliage height, width, and a leaf production rating. 'Earl' was selected for its moderate forage production and good seed production. The other candidates although having higher forage potentials proved to be poor seed producers.

In advanced evaluations from 1977-1979 'Earl' consistently displayed good seedling vigor, excellent regrowth potential after harvest, and good resistance to disease, insects, and cold. Forage samples analyzed for in vitro dry matter digestibility (IVDMD) and crude protein have shown 'Earl' to have higher values in the late summer and into fall than the release variety of 'Kaw'.

Field plantings at 22 different locations in 17 counties in Texas indicate 'Earl' big bluestem is a quality grass species either planted as a single species or as part of a mixture of other native grasses, forbs, and legumes. 'Earl' out performed the standard 'Kaw' at all planting locations in forage production, length of grazing period, and seed production. 'Earl' is adapted for use in range seeding, erosion control plantings, wildlife habitat plantings and plantings for water quality improvement.

'Earl' exhibits the ability to establish and provide ground cover and forage with as little as 18" precipitation. Irrigation, at least supplemental, will be required for adequate production for grazing in areas of less than 22" average annual precipitation. Under proper range management, stands are persisting and remain highly productive eight years after planting.

Notice of Release of 'Earl' Big Bluestem (Continued)

'Earl' is adapted to all soils types throughout the expected, normal range of big bluestem (USDA Plant Hardiness Zones 7 and 8).

Observations of field plantings, data, and literature reviews throughout the years of evaluations indicate that this plant poses no toxic threat to livestock, wildlife, or man. 'Earl's growth characteristic poses no threat of becoming a noxious weed or pest.

The classes Breeder, Foundation, Registered, and Certified seed are to be recognized. Established seed certification standards of the Texas Department of Agriculture are to be used; see Texas Seed Certification Standards. The Natural Resources Conservation Service will maintain the breeder seed. Foundation seed will be produced at the Knox City Plant Materials Center under the supervision of the Texas Foundation Seed Service and the Texas Department of Agriculture until other arrangements are mutually agreed upon by the agencies.

State Consefvationist

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Natural Resources Conservation Service,

Texas

Date

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Director

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Date